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(71) Applicants and

(72) Inventors: BONA, Emanuela [IT/IT]; Via Lamarmora 38, I-10128 Torino (IT). BONA, Raffaele [IT/IT]; Via Lamarmora 38, I-10128 Torino (IT). BONA, Raffaella [IT/IT]; Via Lamarmora 38, I-10128 Torino (IT).

(74) Agents: NIEDERKOFER, Oswald, A., et al.; Samson & Partner, Widenmayerstr. 5, 80538 München (DE).

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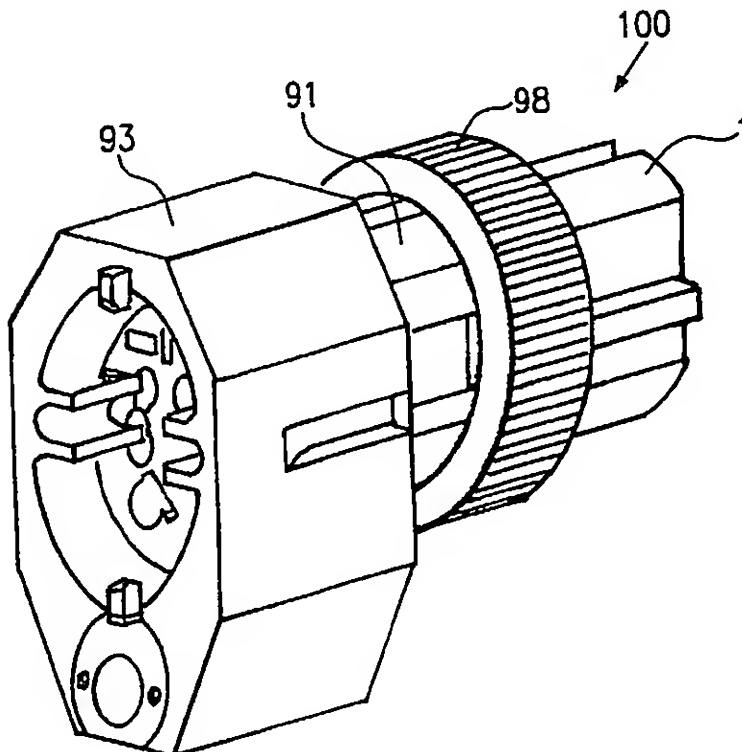
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ELECTRICAL SOCKET ADAPTER



(57) Abstract: The present invention relates to an electrical socket adapter for selectively providing electrical pins and insertion holes in different configurations, the adapter comprising a casing with openings in a front side of the casing and at least one pin holder being removeably placed in the casing, wherein the pin holder comprises electrical pins being extendable through corresponding openings in the casing to protrude from the casing. It is the object of the present invention to provide an electrical socket adapter applicable to a variety of electrical standards and being yet still compact and convenient. This object is solved by an electrical socket adapter of the above mentioned type characterized in that at least one electrical pin being hinged on the pin holder to be selectively extractable from the pin holder, wherein in an operative position the electrical pin protrudes from a front side of the pin holder, and in a rest position, the electrical pin is at least partially retracted in the pin holder.

INTERNATIONAL SEARCH REPORT

International Application No

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01R31/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 477 636 A (NAPIERSKI REINHARD) 1 April 1992 (1992-04-01) column 3, line 13 -column 5, line 51; figures 1,3	1,8,9
A	US 6 328 581 B1 (LEE CHIU-SHAN ET AL) 11 December 2001 (2001-12-11) cited in the application column 2, line 66 -column 5, line 41; figure 1	1
A	DE 198 35 161 C (LOTT OSWALD) 28 October 1999 (1999-10-28) column 3, line 41 - line 66; figure 8	1

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Stirn, J-P

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0477636	A	01-04-1992	DE 4030259 A1	26-03-1992
			AT 146911 T	15-01-1997
			DE 59108430 D1	06-02-1997
			EP 0477636 A1	01-04-1992
US 6328581	B1	11-12-2001	DE 20014987 U1	26-10-2000
			GB 2366087 A	27-02-2002
DE 19835161	C	28-10-1999	DE 19835161 C1	28-10-1999
			AT 233441 T	15-03-2003
			AU 3596899 A	11-10-1999
			DE 19980450 D2	02-08-2001
			WO 9948174 A1	23-09-1999
			EP 1064704 A1	03-01-2001
			ES 2192044 T3	16-09-2003
			JP 2002507828 T	12-03-2002
			US 6520787 B1	18-02-2003